PR 08-JAN-1996; 96US-0584043.
XX
PA (BAYU) BAYLOR COLLEGE MEDICINE.
XX
PI Hauer J, Mims MP, Smith LC, Sparrow JT;
XX
DR WPI; 1997-372622/34.
XX
PT New lipophilic peptide-macromolecule complexes - used for the
PT delivery of macromolecules to cells, particularly for gene therapy
XX
PS Disclosure; Page 16; 106pp; English.
XX
CC This sequence represents a delivery peptide that can be used in the
CC peptide-macromolecule complex of the invention. The peptide-macromolecule
CC complex of the invention is for delivering a macromolecule into a cell,
CC and comprises a non-exchangeable lipophilic peptide (LP) comprising a
CC delivery peptide associated with a lipid moiety, where the delivery
CC peptide portion of the LP is complexed to the macromolecule. The
CC complexes can be used for the delivery of macromolecules such as nucleic
CC acids, proteins, oligonucleotides, lipids or carbohydrates. They can be
CC used to treat diseases by enhancing delivery of specific nucleic acid to
CC the appropriate targeted cells. They can also be used to create
CC transformed cells as well as transgenic animals for assessing human
CC disease in an animal model. They can also be used for livestock
CC agricultural purposes. The complex is capable of transporting the
CC macromolecule in a stable and condensed state and releasing the molecule
CC into the cellular interior. The complex can bind with a cell surface
CC receptor, lyse an endosome and target the nucleus of the cell.
XX
SQ Sequence 20 AA;

Query Match 79.2%; Score 76; DB 18; Length 20;
Best Local Similarity 75.0%; Pred. No. 7.5e-05;
Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GLPKALLKLLKSLWKLLLKA 20
||||:|||:||:|||:|||:|
Db 1 GLPEALLELLESLWELLLEA 20

RESULT 14
AAW24400
ID AAW24400 standard; peptide; 20 AA.
XX
AC AAW24400;
XX
DT 26-SEP-1997 (first entry)
XX
DE JTS-1, a lytic agent used in nucleic acid delivery to cells.
XX
KW Nucleic acid transporter; gene therapy; binding complex; lysis agent;
KW JTS-1; K8; alpha helix; endosome; lysosome; nucleus targeting.
XX
OS Synthetic.
XX
PN WO9640958-A1.
XX
PD 19-DEC-1996.
XX
PF 23-APR-1996; 96WO-US05679.
XX
PR 07-JUN-1995; 95US-0484777.
XX
PA (BAYU) BAYLOR COLLEGE MEDICINE.
XX
PI Smith LC, Sparrow JT, Woo SL;
XX
DR WPI; 1997-052345/05.
XX
PT Nucleic acid transporter useful in gene therapy - contains binding
PT complex associated with surface and nuclear ligands and lysis agent
XX
PS Claim 5; Page 80; 125pp; English.
XX
CC AAW24400 is a lytic peptide agent that is conjugated to a nucleic acid
CC (NA) binding molecule (capable of both condensing and stabilising the
CC NA) to form a nucleic acid transporter system. The lysis agent
CC forms an alpha-helical structure. The transporter system is used to
CC deliver nucleic acid to a cell and for treating humans by gene therapy.
CC By taking advantage of the characteristics of both the lysis agents
CC and the binding molecules, delivery of the nucleic acid is enhanced.
CC Specific lysis agents are capable of releasing the nucleic acid
CC into the cellular interior from the endosome. Release is efficient
CC without endosomal/lysosomal degradation. Once released the binding
CC complexes help target the nucleic acid to the nucleus.
XX
SQ Sequence 20 AA;

Query Match 79.2%; Score 76; DB 18; Length 20;
Best Local Similarity 75.0%; Pred. No. 7.5e-05;
Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GLPKALLKLLKSLWKLLLKA 20
||||:|||:||:|||:|||:|
Db 1 GLPEALLELLESLWELLLEA 20

RESULT 15
AAW24424
ID AAW24424 standard; peptide; 20 AA.
XX
AC AAW24424;
XX
DT 26-SEP-1997 (first entry)
XX
DE Modified lytic peptide used in nucleic acid delivery to cells.
XX
KW Nucleic acid transporter; gene therapy; binding complex; lysis agent;
KW JTS-1; K8; alpha helix; endosome; lysosome; nucleus targeting.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "acetylated"
XX
PN WO9640958-A1.
XX
PD 19-DEC-1996.
XX
PF 23-APR-1996; 96WO-US05679.
XX
PR 07-JUN-1995; 95US-0484777.
XX
PA (BAYU) BAYLOR COLLEGE MEDICINE.
XX
PI Smith LC, Sparrow JT, Woo SL;
XX
DR WPI; 1997-052345/05.
XX
PT Nucleic acid transporter useful in gene therapy - contains binding
PT complex associated with surface and nuclear ligands and lysis agent
XX
PS Disclosure; Page 92; 125pp; English.
XX
CC AAW24421-33 are modified versions of lytic peptides that were conjugated
CC to a nucleic acid (NA) binding molecule (capable of both condensing
CC and stabilising the NA) to form a nucleic acid transporter system.
CC The lysis agent forms an alpha-helical structure. The transporter
CC system is used to deliver nucleic acid to a cell and for treating
CC humans by gene therapy. By taking advantage of the characteristics of
CC both the lysis agents and the binding molecules, delivery of the
CC nucleic acid is enhanced. Specific lysis agents are capable of
CC releasing the nucleic acid into the cellular interior from the endosome.
CC Release is efficient without endosomal/lysosomal degradation. Once